## Missouri Business Education Competencies (Performance Standards)

## **Computer Business Applications**

**Course Rationale:** This area of instruction provides content for knowledge and skills required in the technology-based workplace. The demand will continue to expand for individuals to interact with the computer to create documents, gather information, and solve problems. The content of this class is vital for students planning to enter the workforce or postsecondary education.

The following suggested competencies, developed by an advisory committee, are intended to serve as a basis for your course curriculum. The list is neither inclusive nor required in its entirety. You may select competencies from other lists, and develop competencies of your own to define the outcomes you expect your students to achieve. The Show-Me Standards identified provide a guide. If activities you choose better aligned with other Standards, you should align your competencies/objectives to those Standards instead of these shown here.

COMPETENCIES		SHOW-ME STANDARDS
A. Apply Input Methods		
1.	Demonstrate improvement in speed and accuracy of keyboarding.	1.10
2.	Demonstrate proper keyboarding technique.	1.10
3.	Demonstrate ability to use voice recognition software.	CA1, 1.4
4.	Identify proper ergonomic principles.	HPE6, 4.7
	xecute Basic Computer Operations	
1.	Use system utilities.	CA3, 1.4
2.	Use program interface (e.g., menu items, toolbars, dialog boxes).	CA3, 1.8
3.	Manage files.	CA3, 1.4
4.	Format disks.	CA3, 1.4
5.	Copy disks.	CA3, 1.4
6.	Transfer files.	CA3, 1.4
7.	Identify resources to obtain assistance (e.g., Help menu, software manual, Web site).	CA3, 1.7
8.	Perform basic printer functions (e.g., load paper, change cartridge).	CA3, 3.6
9.	Scan for viruses.	CA3, 3.1
10.	Demonstrate proper network user procedures and protocol (e.g., logging on, saving to network).	CA3, 1.4
11.	Identify security issues related to computer hardware, software, and data.	CA1, 3.1
12.	Identify file formats and extensions.	CA1, 1.4
13.	Perform basic troubleshooting and maintenance.	CA3, 3.2, 3.3
14.	Determine appropriate software applications for tasks.	CA3, 2.7

C. U	C. Use Word Processing Applications		
1.	Demonstrate correct use of spreadsheet terminology.	CA1, 1.2	
2.	Identify a variety of word processing programs.	CA3, 2.3	
3.	Create and format business documents.	CA4, 2.1	
4.	Store and retrieve documents.	CA4, 1.4	
5.	Set printer specifications.	CA4, 1.4	
6.	Proofread and edit copy.	CA1, 2.2	
7.	Enhance documents (e.g., bold, bullets).	CA4, 1.8	
8.	Prepare single envelope.	CA1, 2.1	
	Advanced:		
9.	Create tables.	CA4, 1.8	
10.	Create mail-merge documents.	CA4, 2.1	
11.	Create macros.	CA4, 1.4	
12.	Create and manipulate graphics.	CA4, 2.1	
13.	Create documents using a template.	CA1, 2.1	
14.	Develop templates.	CA1, 2.7	
15.	Convert word processing document to HTML.	CA3, 2.7	
16.	Create hyperlinks within documents.	CA3, 2.7	
17.	Create master document including table of contents	CA4, 2.1	
	and index.		
18.	Prepare multiple envelopes and labels.	CA1, 2.1	
19.	Develop multilevel outline.	CA4, 1.8	
20.	Demonstrate use of enhancement features (e.g., borders, lines, shading).	CA4, 1.8	
21.	Demonstrate use of automatic features (e.g., AutoCorrect).	CA4, 1.4	
22.	Create business documents using advance word processing features (e.g., headers, footers, graphics).	CA4, 2.1	
D. U	Jse Spreadsheet Applications		
1.	Demonstrate correct use of spreadsheet terminology.	CA1, 1.2	
2.	Create spreadsheets.	MA1, 1.8	
3.	Design spreadsheets.	MA1, 1.8	
4.	Edit spreadsheets.	MA1, 2.2	
5.	Create basic formulas with addition, subtraction, multiplication, and division.	MA1, 1.6	
6.	Format cell contents (e.g., font, color, alignment, shading, decimal).	CA4, 1.8	
7.	Format columns and rows.	CA4, 1.8	
8.	Use basic functions (e.g., font, color, alignment, shading, decimal).	MA1, 1.6	
9.	Create charts and graphs.	CA4, 1.8	
10.	Determine validity of spreadsheet results.	MA1, 1.7	
11.	Interpret spreadsheet data.	MA1, 1.7	
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Worksheets, etc.	1	Set print specifications for formulas, graphs, worksheets, etc.	MA1, 1.8
Advanced:	13.	Incorporate spreadsheets in word processing	CA4, 2.3
14.   Link spreadsheet data.   CA4, 1.4     15.   Analyze validity of spreadsheet data.   MA1, 1.7     16.   Create spreadsheet macros.   MA1, 1.4     17.   Use advanced functions/formulas (e.g., payment, future value, statistical).     18.   Enhance spreadsheets.   CA4, 2.1     19.   Use lookup tables.   MA1, 1.4     20.   Demonstrate locking feature.   MA1, 1.4     21.   Demonstrate freezing feature.   MA1, 1.4     22.   Distinguish between relative and absolute cell references.     23.   Create and use named ranges in formulas.   CA1, 1.8     24.   Manipulate spreadsheet data to answer "what if"   MA1, 1.8     questions.   CA4, 1.8     26.   Embed objects in spreadsheets.   CA3, 1.6     27.   Manipulate multiple worksheets in a workbook.   CA4, 1.8     28.   Present spreadsheet data orally to a group.   CA6, 2.1     E. Use Database Applications   CA1, 1.8     1.   Demonstrate correct use of database terminology.   CA1, 1.2     2.   Create a database.   CA3, 1.8     3.   Manipulate a database (e.g., move, delete, insert, edit).     4.   Process material using database features (e.g., query, sort, merge).     5.   Generate and format reports.   CA3, 1.8     6.   Print reports.   CA3, 1.8     7.   Distinguish between different field types.   CA3, 1.8     8.   Demonstrate search/find procedures.   CA3, 1.8     7.   Distinguish between different field types.   CA3, 1.8     8.   Demonstrate search/find procedures.   CA3, 1.8     10.   Integrate database information with spreadsheet/word processing documents.     10.   Integrate database information with spreadsheet/word processing documents.     10.   Integrate database information with spreadsheet/word with database.     11.   Create table relationships.   CA3, 1.8     12.   Modify databases using advance queries (e.g., combine, calculate, update, duplicate).     13.   Design and use forms in database.   CA3, 1.8			
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13. Design and use forms in database. CA3, 1.8	4. 5. 6. 7. 8. 9.	edit).  Process material using database features (e.g., query, sort, merge).  Generate and format reports.  Print reports.  Distinguish between different field types.  Demonstrate search/find procedures.  Advanced:  Integrate database information with spreadsheet/word processing documents.  Integrate word processing/spreadsheet information with database.	CA3, 1.8 CA3, 1.8 CA3, 1.8 CA3, 2.7 CA3, 1.8 CA3, 1.8
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1 (2)	4. 5. 6. 7. 8. 9. 10. 11. 12.	edit).  Process material using database features (e.g., query, sort, merge).  Generate and format reports.  Print reports.  Distinguish between different field types.  Demonstrate search/find procedures.  Advanced:  Integrate database information with spreadsheet/word processing documents.  Integrate word processing/spreadsheet information with database.  Create table relationships.  Modify databases using advance queries (e.g., combine, calculate, update, duplicate).	CA3, 1.8  CA3, 1.8  CA3, 1.8  CA3, 2.7  CA3, 1.8  CA3, 1.8  CA3, 1.8  CA3, 1.8
	4. 5. 6. 7. 8. 9. 10. 11. 12.	edit).  Process material using database features (e.g., query, sort, merge).  Generate and format reports.  Print reports.  Distinguish between different field types.  Demonstrate search/find procedures.  Advanced:  Integrate database information with spreadsheet/word processing documents.  Integrate word processing/spreadsheet information with database.  Create table relationships.  Modify databases using advance queries (e.g., combine, calculate, update, duplicate).  Design and use forms in database.	CA3, 1.8  CA3, 1.8  CA3, 1.8  CA3, 2.7  CA3, 1.8  CA3, 1.8  CA3, 1.8  CA3, 1.8  CA3, 1.6  CA3, 1.8

F. <b>A</b>	pply Desktop Publishing Principles	
1. 71	Demonstrate correct use of desktop publishing	CA1, 1.2
1.	terminology.	CA1, 1.2
2.	Produce documents using text and graphics.	CA4, 2.1
3.	Create and edit page layouts.	CA1, 1.5
4.	Manipulate graphics.	CA5, 1.5
5.	Demonstrate input of data from various sources (e.g., Web, scanner, digital camera).	CA1, 2.7
6.	Apply design and layout principles to publications.	CA5, 1.5
7.	Set print specifications.	CA3, 1.8
8.	Demonstrate use of drawing tools.	CA3, 1.8
G. U	Jse Presentation Software	<u> </u>
1.	Demonstrate correct use of presentation software terminology.	CA1, 1.2
2.	Produce presentations using text, graphics, and transition.	CA5, 2.1
3.	Enhance presentations using sound and animation.	CA5, 2.2
4.	Create presentations using a template.	CA5, 2.1
5.	Apply design and layout principles to presentations.	CA5, 2.2
6.	Set print specifications for outline, slides, etc.	CA3, 1.8
7.	Deliver an oral presentation.	CA5, 2.1
8.	Edit presentations.	CA5, 2.2
9.	Manipulate graphics.	CA5, 2.2
10.	Integrate input from various software applications.	CA5, 2.1
Н. Е	Explore the Internet	
	Demonstrate correct use of Internet terminology.	CA1, 1.2
2.	Demonstrate principal usages of e-mail.	CA1, 2.1
3.	Demonstrate principal usages of the Internet (e.g., search, locating URLs).	CA3, 1.2
4.	Describe how businesses use the Internet.	CA6, 1.2
5.	Identify copyright principles (e.g., public domain, copy protection, licensing).	CA6, 1.2
6.	Evaluate Internet resources.	CA3, 1.7
I. U	se Multimedia in Applications	
1.	Define terms related to multimedia.	CA1, 1.2
2.	List hardware requirements for various types of media.	CA3, 1.4
2		CA6 1.4
3. 4.	Explain multimedia hardware standards.	CA6, 1.4
	Compare categories of multimedia software (e.g., presentation, authoring, animation, sound).	CA3, 1.5
5.	Compress and decompress zip files.	CA3, 1.4
6.	Identify platform differences (e.g., MAC, Windows, NT).	CA3, 2.7

7.	List types of files used in multimedia applications	CA3, 1.5
	(e.g., EPS, GIF, JPG).	
8.	Identify design principles used in multimedia productions.	CA5, 1.5
9.	Download files (e.g., graphics, sound, video, animation).	CA3, 1.4
10.	Burn CD's.	CA3, 1.4
J. C	reate a Web Page	
1.	Demonstrate correct use of Web page terminology.	CA1, 1.2
2.	Define Web page design principles.	CA1, 1.5
3.	Evaluate Web page design.	CA5, 1.5
4.	Use software to create a basic Web page.	CA5, 2.1

Competencies revised in 2001.